

Washington County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/14/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Washington County economy.¹

These 18 sectors have a total direct output of approximately **\$271.6 million** and support **912 jobs** in Washington County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Washington County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	912.4	26.46%	\$70,604,143	27.89%	\$271,640,747	107.32%
Indirect Effect	226.0	6.55%	\$14,310,403	5.65%	\$29,178,667	11.53%
Induced Effect	113.7	3.30%	\$6,893,730	2.72%	\$12,502,629	4.94%
Total Effect	1252.1	36.31%	\$91,808,275	36.27%	\$313,322,043	123.79%

As shown in the above table, agriculture, food, and food processing sectors support **1,252 jobs**, or **36.31%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$313.3 million**, roughly **123.79% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately **\$91.8 million**, or **36.27% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **36.27% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **462 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Washington County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	462.1	\$78,103,077
Animal production, except cattle and poultry and eggs	135.5	\$21,671,582
Grain farming	94.1	\$47,955,682
Farm machinery and equipment manufacturing	87.5	\$40,158,046
Wholesale trade	64.8	\$12,138,330
Dairy cattle and milk production	47.0	\$18,217,965
Oilseed farming	42.7	\$59,990,266
Support activities for agriculture and forestry	30.2	\$1,317,222
Full-service restaurants	22.2	\$735,063
Truck transportation	21.9	\$3,005,466

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$78.1 million** to the Washington County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	462.1	\$78,103,077
Oilseed farming	42.7	\$59,990,266
Grain farming	94.1	\$47,955,682
Farm machinery and equipment manufacturing	87.5	\$40,158,046
Animal production, except cattle and poultry and eggs	135.5	\$21,671,582
Dairy cattle and milk production	47.0	\$18,217,965
Wholesale trade	64.8	\$12,138,330
Owner-occupied dwellings	0.0	\$3,850,990
Monetary authorities and depository credit intermediation	18.9	\$3,148,978
Truck transportation	21.9	\$3,005,466

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Washington County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	42.7	\$59,990,265.89
Grain farming	94.1	\$47,955,681.64
Vegetable and melon farming	0.2	\$28,480.35
Fruit farming	0.9	\$75,862.22
Tree nut farming	0.0	\$21.74
Greenhouse, nursery, and floriculture production	1.5	\$180,824.76
All other crop farming	17.5	\$1,812,576.09
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	462.1	\$78,103,076.74
Dairy cattle and milk production	47.0	\$18,217,965.02
Poultry and egg production	0.4	\$325,639.95
Animal production, except cattle and poultry and eggs	135.5	\$21,671,582.27
Commercial hunting and trapping	1.5	\$31,337.16
Bread and bakery product, except frozen, manufacturing	5.1	\$561,370.90
Frozen cakes and other pastries manufacturing	4.7	\$863,979.81
Breweries	1.8	\$889,760.74
Farm machinery and equipment manufacturing	87.5	\$40,158,045.85
Veterinary services	7.8	\$674,739.15
Landscape and horticultural services	2.2	\$99,536.77

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Washington County, the retail sector was omitted.